In re: Wail Refai et al. Serial No.: 09/754,490

Filing Date: January 4, 2001

Page 12 of 16

REMARKS

Applicants appreciate the reopening of prosecution of the present application with the Office Action mailed December 29, 2006 ("Office Action"), and the indication that Claims 2, 3, 8, 9, 15, 16, 18, 22, 25, 26, 28, 37, 38, 41, 42 and 44 recite patentable subject matter. Applicants respectfully request reconsideration and withdrawal of the objections and rejections of Claims 1-3, 5-18 and 20-44 for at least the reasons discussed below.

The claim objections

Regarding the claim objections on pages 2 and 3 of the Office Action, Applicants have amended Claims 11 and 28 as suggested. Accordingly, Applicants request that the objections be withdrawn.

The §112 rejections

Applicants respectfully traverse the §112 rejections of Claims 2, 15, 25, 37 and 41, as the term "compliant" is not indefinite. As defined in Merriam Webster's Collegiate Dictionary, 10^{th} ed., "compliant" means "ready or disposed to comply", where to "comply" is defined as "to conform . . . to a rule." One of ordinary skill in the art would readily discern that "compliant with the wireless communications standard" refers to conforming to the standard, conforming to IS-95, IS-2000 or some other wireless communications standard. Accordingly, Applicants submit that Claims 2, 15, 25, 37 and 41 are not indefinite and respectfully request withdrawal of the §112 rejections.

The claims are patentable over the cited references

Independent Claims 1, 24, 32 and 36 stand rejected as being allegedly anticipated by U.S. Patent No. 6,307,849 to Tiedemann, Jr. ("Tiedemann"). Office Action, p. 4. Regarding the rejection of Claim 1, the Office Action states "Tiedemann discloses . . . identifying . . . a second radio configuration available for a second node (base station 16 in Fig. 1, col. 4, line 48) that supports a second set of radio configurations (pilot channels) that is different from the first set of radio configurations (traffic channels)." Office Action, p. 4.

Respectfully, this basis appears to involve a misunderstanding of the phrase "radio configuration." As used in the art of cellular communications, a "radio configuration" is a set

Page 13 of 16

of traffic channel transmission formats that are characterized by physical layer parameters such as transmission rates, modulation characteristics and spreading rate. *See*, *e.g.*, Data Service Options for Spread Spectrum Systems: Introduction and Service Guide, 3GPP2 C.S0017-001-A, Version 1.0 (June 11, 2004) (also Telecommunications Industry Association (TIA) TIA-707.01-B). The wording of the Office Action is somewhat confusing, but the Office Action appears to assert that "pilot channels" and "traffic channels" are two different radio configurations. As the phrase "radio configuration" is used in the art, these categories do not represent "radio configurations." Accordingly, Applicants submit that the assertion that Tiedemann teaches "identifying a second radio configuration available for a second node that supports a second set of radio configurations that is different from the first set of radio configurations" is erroneous.

The Office Action appears to further assert that a "soft handoff" described in column 5 of Tiedemann teaches "simultaneously communicating between the wireless terminal and respective ones of the first and second nodes according to the identified second radio configuration using a common channel coding including a common spreading code." Tiedemann does not disclose or suggest interactions of a terminal with nodes (e.g., base stations) that have different sets of radio configurations because, as noted above, Tiedemann does not discuss selecting from among plurality radio configurations. Rather, Tiedemann is directed to methods and systems in which feedback from mobile terminals is used to control code channel powers of base stations. *See* Tiedemann, column 3, lines 5-21.

Accordingly, Tiedemann does not disclose or suggest several of the recitations of independent Claim 1 and, for at least these reasons, Applicants submit that independent Claim 1 is patentable over Tiedemann. Applicants further submit that independent Claims 24, 32 and 36 are patentable over Tiedemann for at least similar reasons.

Independent Claims 14 and 40 stand rejected as being allegedly obvious with respect U.S. Patent No. 7,043,244 to Fauconnier ("Fauconnier") in view of Tiedemann. Office Action, p. 9. Regarding Claim 14, the Office Action asserts that Fauconnier teaches all of the recitations of Claim 14 except "a common radio configuration having a common channel coding including a common spreading code" and that Tiedemann supplies the missing teachings. Office Action, pp. 9 and 10

Page 14 of 16

Claim 14 recites:

A method of performing handoff of a wireless terminal from a first base station supporting a first set of radio configurations to a second base station supporting a second set of radio configurations that is different than the first set of radio configurations, the method comprising:

determining whether a common radio configuration having a common channel coding including a common spreading code is available for the first and second base stations; and

handing off the wireless terminal from the first base station to the second base station based on the determination of whether a common radio configuration is available for the first and second base stations.

Fauconnier does not discuss operations of base stations having different sets of radio configurations. Rather, the description of handover in Fauconnier presumes that a common radio configuration is already in use, i.e., Fauconnier includes no description of base stations with first and second different sets of radio configurations and, thus, includes no disclosure or suggestion of "determining whether a common radio configuration having a common channel coding including a common spreading code is available for the first and second base stations" and "handing off the wireless terminal from the first base station to the second base station based on the determination of whether a common radio configuration is available for the first and second base stations." For example, the cited column 7 from Fauconnier states:

User messages are transmitted on dedicated transport channels across the air interface, i.e. on channels dedicated for transmissions between a particular mobile terminal and one or more base stations 17, 18 (soft handover, often called macrodiversity). Dedicated channels should be distinguished from common channels used for general communication purposes with a plurality of mobile terminals, e.g. paging channels, common random access channels, broadcasting channels. Messaging across the air interface on dedicated channels involves complex digital signal processing which is defined by certain parameters, e.g. types of spreading codes or forward error coding, data rate, bandwidth, frequency, encryption method and/or change of encryption keys, and these must be known to the mobile terminal 7 and the base stations 17, 18 in advance before successful communication can take place. Hence, the digital transmissions across the air interface on dedicated channels have a certain common radio link configuration which is a complete specification of these parameters. Note that power control is performed between each base station and the mobile terminal independently so that power control does not belong to a common configuration of all base stations involved in the macro-diversity. Any change of the parameters of this common configuration must be communicated to the respective transmitters and receivers involved in the communication before the change may be implemented. When a mobile terminal 7 is in soft handover there is a common radio

Page 15 of 16

configuration of the radio links between the different base station 17, 18 and the mobile terminal 7. Hence, it is preferably to communicate a change of configuration to the mobile terminal 7 and all the base stations 17, 18 involved in the current communication with the mobile terminal 7 before a configuration change can take place.

In other words, Fauconnier is silent as to how a common radio configuration is established, as Fauconnier is concerned with how to change a parameter of a radio configuration while in soft handover, so that the parameter change may be implemented in concert by the network elements involved. This is not equivalent to the recitations of Claim 14. Tiedemann does not supply the missing teachings because, as noted above, Tiedemann does not deal with selecting from among plural radio configurations.

Therefore, Applicants submit that the combination of Fauconnier does not teach or suggest all of the recitations of independent Claim 14 and, for at least these reasons, Applicants submit that independent Claim 14 is patentable. Applicants further submit that Claim 40 is patentable over Fauconnier and Tiedemann for at least similar reasons.

Applicants submit that dependent Claims 2, 3, 5-13, 15-18, 20-23, 25-31, 3-35, 37-39 and 41-44 are patentable at least by virtue of the patentability of the respective ones of independent Claims 1, 14, 24,32, 36 and 40 from which they depend. Applicants further submit that several of the dependent claims are separately patentable, as indicated in the Office Action.

Conclusion

Applicant submits that the claims are in condition for allowance for at least the reasons discussed above. Accordingly, Applicant requests allowance of the claims and passing of the application to issue in due course. The Examiner is encouraged contact the undersigned at 919-854-1400 for resolution of any outstanding issues.

Respectfully submitted,

Robert M. Meeks Attorney for Applicant

Registration No. 40,723

Page 16 of 16

USPTO Customer No. 20792 Myers Bigel Sibley & Sajovec Post Office Box 37428 Raleigh, North Carolina 27627

Telephone: 919/854-1400 Facsimile: 919/854-1401

CERTIFICATION OF TRANSMISSION

I hereby certify that this correspondence is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4) to the U.S. Patent and Trademark Office on March 19, 2007.

Candi L. Riggs